Aerohive
NETWORKS

AP245X

High performance, general-purpose, 802.11ac Wave 2 dual-radio 3x3:3 Access Point with external antennas

AP245X combines high-performance 802.11ac Wave2 with the simplicity of Aerohive's distributed, cooperative architecture. This access point has an extended operating temperature range and external antenna connectors. AP245X is a perfect fit for challenging environments where deployments require specialized antennas or higher temperature ranges.

This power optimized access point line uniquely incorporates next generation 802.11ac, integrated BLE radio for iBeacon and other beacon applications and a standard USB port for variety of IoT applications. AP245X smoothly integrates into your existing 802.3af or 802.3at power and network infrastructure.

AP245X is a key component of the Aerohive Connect solution. Connect provides cloud-managed connectivity built on Aerohive's industry-first cooperative control Wi-Fi focused on optimizing speed and resilience. Connect is centrally managed from the cloud, allowing for simple, fast, and powerful management.

AEROHIVE CONNECT COMPONENTS

ENTERPRISE CONNECTIVITY

- 3x3 Wave 2 802.11ac technology with MU-MIMO capability and 3 spatial streams

- Built-in Bluetooth Low Energy for iBeacon/ other beacon technologies

- IoT readiness with USB port

- Full performance with IEEE 802.3af power

- Trusted Platform Module (TPM) – Hardware-based key storage and encryption

- RF-IQ antenna and radio technology

CLOUD MANAGEMENT

- Network Device and Client Monitoring

- Global Search and Filter function

- Auto-Provisioning Tools for quick and easy deployment

- Network Health View

- Versatile RF Planning

- Guided Network Configuration Setup

- 802.1X and PSK Secured Networks

- Guest Access functionality with configurable Captive Web Portal

HIVECARE SUPPORT

- HiveCare Community Support: forum-based interactive support

- HiveCare Connect CallBack service *(optional)*

- Wide array of online resources and tools

PRODUCT SKUs

SKU	DESCRIPTION
AH-AP-245X-AC-FCC	AP245X Indoor plenum rated Access Point, 2 radio 3x3:3 802.11a/b/g/n/ac, MU-MIMO, external antennas, 2 10/100/1000 Ethernet ports, FCC regulatory domain, without power supply (Antennas sold separately)
AH-AP-245X-AC-W	AP245X Indoor plenum rated Access Point, 2 radio 3x3:3 802.11a/b/g/n/ac, MU-MIMO, external antennas, 2 10/100/1000 Ethernet ports, configurable regulatory domain, without power supply (Antennas sold separately)

PRODUCT SPECS

Radio Specifications—802.11a
• 5.150–5.850 GHz Operating Frequency
• Orthogonal Frequency Division Multiplexing (OFDM) Modulation
• Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback

Radio Specifications—802.11b
• 2.4–2.5GHz Operating Frequency
• Direct-Sequence Spread-Spectrum (DSSS) Modulation
• Rates (Mbps): 11, 5.5, 2, 1 w/auto fallback

Radio Specifications—802.11g
• 2.4–2.5 GHz Operating Frequency
• Orthogonal Frequency Division Multiplexing (OFDM) Modulation
• 20 dBm (100 mW) Transmit Power
• Rates (Mbps): 54, 48, 36, 24, 18, 12, 9, 6 w/ auto fallback

Radio Specifications—802.11n
• 2.4–2.5 GHz & 5.150–5.850 GHz Operating Frequency
• 802.11n Modulation
• Rates (Mbps): MCS0–MCS23 (6.5Mbps - 450Mbps)
• 3x3:3 Stream Multiple-In, Multiple-Out (MIMO) Radio
• HT20 High-Throughput (HT) Support (for both 2.4 GHz and 5 GHz)
• HT40 High-Throughput (HT) Support for 5 GHz
• A-MPDU and A-MSDU Frame Aggregation

Radio Specifications—802.11ac
• 5.150–5.850 GHz Operating Frequency
• 802.11ac Modulation (256-QAM)
• Rates (Mbps): MCS0–MCS9 (6.5Mbps - 1300Mbps), NSS = 1-3.
• 3x3:3 Stream Multiple-In, Multiple-Out (MIMO) Radio
• VHT20/VHT40/VHT80 support

Included Mounting Options
• Wall Mount
• Ceiling Tile flush 15/16" and Wall Mount locking accessory included with AP

Mounting
• Desktop
• Ceiling Tile Recessed 15/16", 3/8", 9/16" sold as an accessory
• Ceiling Tile flush 3/8", 9/16" sold as an accessory
• Suspend Mount sold as an accessory
• Plenum Mount sold as an accessory
• Silhouette and Interlude sold as an accessory

Antennas
• 3x RP-SMA connector 2.4 GHz
• 3x RP-SMA connector 5 GHz
• 1x BLE internal antenna

Interfaces
• Two Autosensing 10/100/1000 Base-T Ethernet ports. PoE (Power over Ethernet 802.3af) ca pability on one of the ports
• RJ-45 console port
• Standard USB port

Physical
• WxDxH: 7.25" x 7.25" x 1.87"(18.4 cm x 18.4 cm x 1.87cm) [plus .25", mounting hardware – 2.12" (5.4 cm) H total]
• Weight: 1.8 lb (0.81 kg)

Environmental
• Operating: 0 to +50°C, Storage: -40 to +70°C
• Humidity: 95%

Environmental Compliance
• UL2043

Power Specifications
• IEEE 802.3af PoE Power: Full 3x3:3 802.11ac MU-MIMO performance and BLE. No USB port, no 2nd Ethernet port.
• IEEE 802.3at PoE Power: full set of features (all of the above plus USB port and 2nd Ethernet port).

Power Options
• Power Draw: Typical 11.22W, Max 15.74W

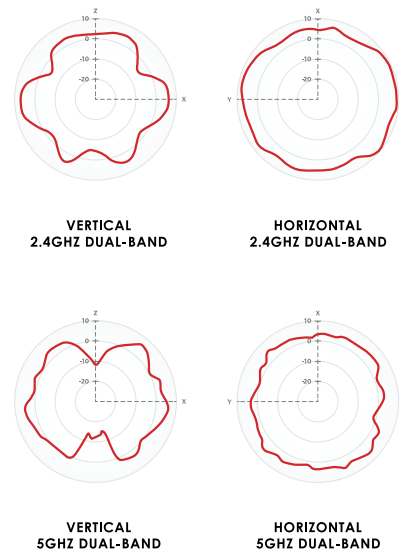**Certifications**
• WPA/WPA2
• Voice-Enterprise

TRANSMIT POWER TABLE

2.4 GHZ	DATA RATE	POWER (dBm)
11b	1,2,5.5,11	20
11g	54 Mbps	17
	48 Mbps	18
	36 Mbps	19
	6 Mbps	19
11n HT20	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,1,2,3,4	19
	MCS8,9,10,11,12	19
	MCS16,17,18,19,20	19

5 GHZ	DATA RATE	POWER (dBm)
11a	54 Mbps	17
	48 Mbps	18
	36 Mbps	19
	6 Mbps	19
11n HT20	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,2,3,4,8,9,10,11	19
	MCS12,16,17,18,19,20	19
11n HT40	MCS7,15,23	17
	MCS6,14,22	18
	MCS5,13,21	19
	MCS0,1,2,3,4,8	19
	MCS9,10,11,12,16	19
	MCS17,18,19,20	19
11ac VHT	256QAM@3/4 Code Rate	14
	256QAM@5/6 Code Rate	13

RECEIVE SENSITIVITY TABLE

2.4 GHZ	DATA RATE	SENSITIVITY
11b	1 Mbps	-100
	11 Mbps	-93
11g	6 Mbps	-95
	36 Mbps	-86
	48 Mbps	-82
	54 Mbps	-80
11n HT20	MCS0,8,16	-95
	MCS5,13,21	-81
	MCS6,14,22	-79
	MCS7,15,23	-77

5 GHZ	DATA RATE	SENSITIVITY
11a	6 Mbps	-95
	36 Mbps	-86
	48 Mbps	-81
	54 Mbps	-80
11n HT20	MCS0,8,16	-91
	MCS5,13,21	-78
	MCS6,14,22	-76
	MCS7,15,23	-74
11n HT40	MCS0,8,16	-88
	MCS5,13,21	-75
	MCS6,14,22	-73
	MCS7,15,23	-71
11ac HT20	Code Rate 3/4	-65
	Code Rate 5/6	-63
11ac HT40	Code Rate 3/4	-62
	Code Rate 5/6	-60
11ac HT80	Code Rate 3/4	-59
	Code Rate 5/6	-57

RADIATION PATTERNS

VERTICAL 2.4GHZ DUAL-BAND

HORIZONTAL 2.4GHZ DUAL-BAND

VERTICAL 5GHZ DUAL-BAND

HORIZONTAL 5GHZ DUAL-BAND

Note: Power shown is per transmit chain and is the maximum power that the radio is capable of.

Power limits will be limited by local radio regulations.

WARRANTY & SUPPORT

This Aerohive Networks device is backed by a limited lifetime hardware warranty. HiveCare Community Support is included with the Connect Access Point. Optional HiveCare Callback service may also be purchased.

For complete support terms go to **www.aerohive.com/support**.

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